

NEW ALTERNATIVES FOR WATER ACCESS

Gan Kok Boon (Singapore)

Land, fuel and raw materials are greatly valued in Singapore, a country without any natural resource. Because of the high population density compounded by small water catchment areas, Singapore cannot produce enough fresh water to satisfy both residential and commercial needs. In the future, this problem will worsen given the projected increase in water demand.

Concerning water conservation, households in Singapore are taxed incrementally for their water usage. The more they use, the more they will be taxed at a higher percentage of their water core. Commercial companies especially manufacturing plants are supplied with non-portable water when possible. The launch of "water-efficient homes" in 2003 including the use of non-dripping taps and the installation of water saving devices is also a big step towards cutting down on common water wastage in households. Public awareness about the importance of water is raised through water conservation campaigns.

In recent years, there have been arguments between Singapore and Malaysia over the pricing of water. Moreover, Malaysia will have to meet its own domestic demands before exporting water to Singapore. There may be a possibility that Malaysia may not extend the contract to supply water to Singapore. As such, an alternative water source has been found. NEWater is a common term heard in Singapore. It is the name given to portable water recycled from sewages through stringent process of micro-filtration and reverse osmosis. Initially, the public is skeptical of it because it is recycled from sewage. However, NEWater has now begun to enjoy public acceptance.

Concerning water, how are women related to this topic? Recently, women in Singapore literally have had less contact with water. With the rise of women in the working society, males and females both share common household chores like laundry and cooking.

Olivia Lum is the founder and CEO of Hyflux Ltd, a publicly listed company in Singapore. Hyflux is currently the regional leader in water treatment systems with a market capitalization of S\$450 million. Her company uses cutting-edge technology to produce equipment for high-end water treatment. A specific product worthy of mention

is the Dragonfly™, which produces pure drinking water through the absorption of moisture from the atmosphere. While cost will be high and perhaps prohibitive for many, the water solutions that Hyflux currently produces will bode well in the future when an economy of scale is developed.

Olivia Lum epitomizes the direction in which women will go. Traditionally, politics in Singapore are male dominated and as such, national policies and decision-making regarding water issues are made by males. As we step into the New Economy, we now have more women in the professional sector than ever before. From being mere users of water, women have embarked on new routes to tackle water issues through commercial means as innovators, engineers and product developers. Women may or may not play a greater role than men concerning water issues. It is certain, however, that they will increasingly play a larger role.

With the steps taken by the government and the increasing contributions from women, there is a conviction that water issues will not be a hindrance for Singapore economic growth.

The imbalance between supply and demand is currently solved by importing water from Malaysia. However, not only is having sufficient fresh water important, it is equally important to have a secure long-term supply freshwater. The government recognizes this and has taken a two-pronged strategy to ensure the conservation of water conserved and a sufficient long-term water supply.